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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,781	01/14/2002	Amos Dor	006282/FET/MDR/DSI	5642

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APPLIED MATERIALS, INC.
2881 SCOTT BLVD. M/S 2061
SANTA CLARA, CA 95050

EXAMINER

PROCTOR, JASON SCOTT

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,781

Applicant(s)

DOR ET AL.

Examiner

Jason Proctor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claims 1-6 have been presented for examination. Claims 1-6 have been rejected.

Claim Objections

1. Claims 2-6 are objected to under 35 CFR 1.75(c) for failing to refer back to an earlier claim or claims in the same application. Claim 2 depends from claim 2, while claims 3-6 depend directly or indirectly from claim 2. The Examiner presumes claim 2 should depend from claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-6 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 recites "a defect source identifier" that comprises two software applications (a LotRoute database generation process and a LotRoute database access process). As such, claim 1 recites software *per se*. Please see MPEP 2106(IV)(B)(1)(a), which states:

(a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings *Per Se*

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

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Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

The Examiner respectfully suggests claiming the "defect source identifier" as executed by a computer system or some equivalent.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the LotRoute database process" in line 10. There is insufficient antecedent basis for this limitation in the claim. The claim contains a previous recitation of "a LotRoute database generation process" and "a LotRoute database access process". The Examiner presumes line 10 should read "the LotRoute database access process".

Claim 3 recites the limitation "the Route ID" in 16. There is insufficient antecedent basis for this limitation in the claim. The Examiner presumes this refers to the "Fixed Route ID" of claim 2, however the "Fixed Route ID" is a member of an alternative list. Therefore, claim 3 and its dependents refer to an alternative embodiment of the invention of claim 2 and do not have proper antecedent basis. The Examiner respectfully suggests claiming the alternative

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embodiments of claim 2 as separate claims, while claims 3-6 depend from the appropriate embodiment.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent 6,763,130 to Somekh et al. (Somekh).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Somekh discloses a defect source identifier [*“inspection tool 300”*, (column 4, lines 36-43)] that provides information used to identify a source of a defect on a substrate [*“Next, a list of tool identifiers associated with tools visited by wafer W is generated by processor 320”* (column 4, lines 44-54)], which defect source identifier comprises:

A LotRoute database generation process and a LotRoute database access process [*“the tool identifier data stored in MES 340”*] is functionally equivalent to a database. (column 4, lines 44-54) For such tool identifier data to exist, it is inherent that the claimed database generation process was performed.], wherein

The LotRoute database generation process comprises a software application that runs on a server and that, in response to user input, defines a wafer route including wafer route information, and associates the wafer route with any one of a number of entities [*“Next, a list of tool identifiers associated with tools visited by wafer W is generated by processor 320 retrieving the tool identifier data stored in MES 340 [...]” “The list of tool identifiers can be displayed on monitor 330 as a list of tool names [...]”*] (column 4, lines 44-54) Here, “entities” refers to “tools”. For such tool identifier data to exist, it is inherent that the claimed database generation process was performed. See also MPEP 2112.02, which states in part, *“Under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device.”*]; and

The LotRoute database process comprises a software application that runs on the server and that, in response to input from the defect source identifier, retrieves the wafer route information using an identifier of one of the entities [*“Next, a list of tool identifiers associated with tools visited by wafer W is generated by processor 320 retrieving the tool identifier data stored in MES 340 [...]” “The list of tool identifiers can be displayed on monitor 330 as a list of tool names [...]”*] (column 4, lines 44-54)].

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Regarding claim 2, Somekh discloses that the entities are one of Inspection/Review Tool ID [*"The list of tool identifiers can be displayed on monitor 330 as a list of tool names, such as "Etcher 5" or "Cleaning Station 2". (column 4, lines 44-54)].*

Claims 3-6 refer to an alternative embodiment of the invention of claim 2. As the Somekh anticipates one embodiment of the invention of claim 2, which embodiment is not referred to by claims 3-6, these claims are anticipated by Somekh.

Conclusion

Art considered pertinent by the examiner but not applied has been cited on form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Proctor whose telephone number is (571) 272-3713. The examiner can normally be reached on 8:30 am-4:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached at (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

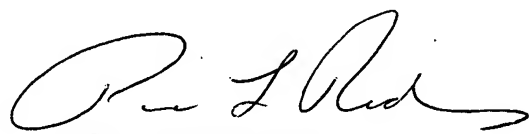
Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or

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Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Proctor
Examiner
Art Unit 2123

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 7/20/05
Paul L. Rodriguez
Primary Examiner
Art Unit 2125